

EVIDENTIARY HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)	
)	
Application for Certification)	Docket No.
of SMUD's Cosumnes Power Plant)	01-AFC-19
Project)	
_____)	

HENDRICKSON HALL
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HERALD, CALIFORNIA 95638

FRIDAY, MARCH 14, 2003

9:40 a.m.

Reported by:
Valorie Phillips
Contract No. 170-01-001

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

Robert Pernell, Presiding Member

HEARING OFFICER, ADVISORS PRESENT

Garret Shean, Hearing Officer

E.V. (Al) Garcia, Advisor

STAFF AND CONSULTANTS PRESENT

Caryn Holmes, Staff Counsel

Kristy Chew, Project Manager

William Walters, Senior Associate
Aspen Environmental Group

Michael Clayton,

Jeri Scott

Dale Edwards

PUBLIC ADVISER

Roberta Mendonca

APPLICANT

Jane E. Luckhardt, Attorney
Downey, Brand, Seymour & Rohwer

Steven M. Cohn, Assistant General Counsel

Maria de Lourdes Jimenez-Price, Attorney

Colin Taylor, Project Director

Kevin Hudson, Licensing Project Manager

Bob Nelson, Superintendent, Project Development

Scott Flake, Superintendent, Project Development
Engineering

Mark Bastasch, Project Engineer

Thomas Priestley, Senior Environmental Planner

APPLICANT - CONTINUED

Wendy E. Haydon, Environmental Planner
CH2MHILL

Don Logan, Transportation Engineer
CH2MHILL

INTERVENORS

Kathy Peasha

Dustin Peasha

ALSO PRESENT

Matt Kelly
Sacramento-Sierra's Building and Construction
Trades Council

Karen French, Local Homeowner

Virginia Colla, Local Resident

Len Reid Reynoso, Resident

Carol Backert, Resident

Tim Reinart, Resident

Ruth Anne Rose, Resident

Tom May, Resident

Ernest De Angelo, Resident

Marlene De Angelo, Resident

Diane Moore, Resident/Biologist

Jim Buntin, Buntin & Associates

Jacques Peasha, Resident

Stephan Carrillo, Police Seargent

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P R O C E E D I N G S

9:38 a.m.

PRESIDING MEMBER PERNELL: Good morning; this is a continuation of the hearing of the SMUD Cosumnes Project. My name is Commissioner Pernell. I'm the Presiding Member of the Committee. The Associate Member is Commissioner Rosenfeld, who is unable to be here today.

To my left is my Advisor, Al Garcia; to my right is our Hearing Officer, Mr. Shean. At this time I'd like the -- can everybody hear me? At this time I'd like the parties to introduce themselves and their team, starting with the applicant, please.

MR. COHN: Commissioner Pernell, Mr. Shean, Mr. Garcia, my name is Steve Cohn, appearing on behalf of Sacramento Municipal Utility District. My co-counsel, Jane Luckhardt, is seated to my right. On my left, Project Director Colin Taylor and Project Manager Kevin Hudson. Also Lourdes Jimenez-Price, on behalf of the District.

PRESIDING MEMBER PERNELL: Good morning, welcome. Staff, please.

MS. HOLMES: Thank you, good morning.

1 My name is Caryn Holmes; I'm the Attorney for the
2 Energy Commission Staff assigned to this project.
3 And sitting to my right is Kristy Chew, who's the
4 staff's Project Manager. And also at the table
5 and various places in the audience we have several
6 members of staff's technical team.

7 PRESIDING MEMBER PERNELL: Okay, thank
8 you. Are there any public agencies, any public
9 agencies? Anyone representing other organizations
10 or any community-based organizations?

11 MR. KELLY: My name is Matt Kelly and I
12 represent the Sacramento Building and Construction
13 Trades Council.

14 PRESIDING MEMBER PERNELL: Thank you.
15 Welcome. At this time we have a Public -- oh, I'm
16 sorry. Intervenors?

17 MS. PEASHA: Good morning,
18 Commissioners. My name is Kathy Peasha,
19 Intervenor. And I will have -- I am with myself.

20 HEARING OFFICER SHEAN: Well, do you
21 want to introduce your assistant?

22 MS. PEASHA: And my -- this will be one
23 of my witnesses, Dustin Peasha. And he'll be
24 witnessing on some of the noise quality.

25 PRESIDING MEMBER PERNELL: Okay, great.

1 All right, the Public Adviser has a brief
2 statement.

3 MS. MENDONCA: Good morning. I'd just
4 remind members of the audience that wish to
5 participate this morning, we'd ask you to fill out
6 a blue card. And when they're filled out, I'll
7 pick them up and give them to the speaker. And
8 for those of you who have not attended an
9 evidentiary hearing before there's a brief one-
10 page summary of what we're doing today and
11 (inaudible) creating evidence for the decision-
12 making.

13 Thank you.

14 PRESIDING MEMBER PERNELL: Thank you.
15 At this time I'll turn the hearing over to our
16 Hearing Officer, Mr. Shean.

17 HEARING OFFICER SHEAN: Good morning. I
18 just want to acknowledge and thank Bonnie Hayes
19 for provisioning us with food yesterday and today.

20 PRESIDING MEMBER PERNELL: Yes.

21 (Applause.)

22 HEARING OFFICER SHEAN: As well as the
23 sound system. She's taken great care of us;
24 fattening a few of us up. So, thank you very
25 much, Bonnie.

1 We're going to begin this morning with
2 visual resources. And we have SMUD here with its
3 visual witnesses, and they will be available for
4 cross-examination at the request of Ms. Peasha.

5 MS. HOLMES: Mr. Shean, did you want to
6 begin with compliance, which we carried over from
7 yesterday? We have our compliance witness
8 available, as well.

9 HEARING OFFICER SHEAN: All right.
10 Yeah, we'll back that up and do that. Why don't
11 you -- well, let's do what we did yesterday with
12 respect to swearing in witnesses. So, if there's
13 any person who is here who intends to be
14 testifying under oath, we'll ask you to stand and
15 now be sworn by our court reporter.

16 MR. COHN: Mr. Shean, those who have
17 already been sworn yesterday are still --

18 HEARING OFFICER SHEAN: Yeah, obviously
19 need not do that.

20 MR. COHN: -- still sworn. All right.
21 Whereupon,

22 ALL WITNESSES PRESENT
23 were called as witnesses herein, and after first
24 having been duly sworn, were examined and
25 testified as follows:

1 MS. HOLMES: Thank you. Staff's witness
2 on general conditions, including compliance
3 monitoring enclosure plan is Jeri Scott, who is
4 seated at the table. Jeri could you please spell
5 your name for the court reporter?

6 DIRECT EXAMINATION

7 MS. SCOTT: J-E-R-I S-C-O-T-T.

8 MS. HOLMES: And Ms. Scott, did you
9 prepare the portion of the FSA that I just
10 identified, the general conditions, including
11 compliance monitoring enclosure plan with the
12 exception of Com-8?

13 MS. SCOTT: Yes I did.

14 MS. HOLMES: And was a statement of your
15 qualifications included in the FSA?

16 MS. SCOTT: Yes it is.

17 MS. HOLMES: And do you have any
18 corrections or changes to make to your testimony
19 at this time?

20 MS. SCOTT: Yes I have, just one minor
21 change.

22 MS. HOLMES: Could you identify the
23 page?

24 MS. SCOTT: The page is 7.1-16,
25 Verification Changes, that's the title. And I

1 would like to make one change. Pursuant to
2 section 1770 instead of section 1769 (d),. So
3 once again, the change, it should be 1770 instead
4 of 1769 as the section relating to verification
5 changes.

6 MS. HOLMES: Thank you. Does that
7 conclude your corrections?

8 MS. SCOTT: Yes it does.

9 MS. HOLMES: And with those corrections,
10 are the facts contained in your testimony true and
11 correct?

12 MS. SCOTT: To the best of my knowledge,
13 yes.

14 MS. HOLMES: And are the opinions
15 contained in this testimony your best professional
16 judgement?

17 MS. SCOTT: Yes they are.

18 MS. HOLMES: Ms. Scott, would you please
19 provide a very brief summary of how the compliance
20 process works?

21 MS. SCOTT: Yes. The compliance process
22 is similar to the siting process. I am the CPM
23 and I head up a team of approximately 15 Energy
24 Commission staff persons. In fact, these are the
25 same people who worked on the different technical

1 areas during the siting process.

2 The compliance teams purpose is to
3 oversee construction and operation of this
4 project. And in order to insure compliance with
5 the conditions of certification in the Commission
6 decision, the project owner is required to submit
7 verification to the compliance team showing
8 compliance with the conditions of certification.

9 Now, this verifications comes in the
10 forms of documents. And once the document is
11 received it's entered into our tracking system and
12 is distributed to the appropriate staff person who
13 reviews it and determines whether or not the
14 document satisfied the conditions of
15 certification.

16 Now during the construction phase of the
17 project, there will be additional people working.
18 There will be specialists on the site that will be
19 reporting to the CPM team and also recording the
20 daily activities and a monthly compliance report.
21 During the 24 months of construction, the project
22 owner is required to submit to the CPM a monthly
23 compliance report.

24 This monthly compliance report will
25 detail what has occurred on the site during the

1 previous month. Describer all submittals that
2 have been sent to the Energy Commission and
3 explain what construction will occur in the
4 following two months.

5 Now during the construction of the
6 project, the CPM will make regular site visits as
7 will the members of the team. The public may
8 inquire about any -- any document that the project
9 owner submits, unless it is designated
10 confidential. And we keep a tracking system of
11 every document that is submitted.

12 And members of the public can contact
13 the CPM to obtain copies of any submittal. I
14 think basically that's it. During the
15 construction process and during the operation
16 process if there, if the project owner wants to
17 make any changes to the project description, any
18 changes to the conditions of certification, they
19 must petition the Energy Commission staff.

20 We will review it, conduct an
21 independent analysis, much the same as the ones
22 that were completed during the siting process.
23 Make a recommendation and present it to the entire
24 Energy Commission for their approval.

25 Now the members of the public will be

1 informed of any changes to the project. What I
2 plan to do is to maintain the list. All the lists
3 that were compiled during the siting process. So
4 I will have a list of the property owners,
5 intervenors and agencies. And they will be
6 notified of any changes to this project. Are
7 there any questions?

8 MS. HOLMES: The witness is available
9 for cross-examination.

10 CROSS-EXAMINATION

11 MS. PEASHA: I'm Kathy Peasha have a few
12 questions. You stated that during the
13 construction period there will be -- a quote made
14 by our -- correct me if I'm wrong -- two months
15 prior, the method of the construction that's going
16 to be done, is that correct?

17 MS. SCOTT: Uh, no, no that is not what
18 I intended to say. So may I repeat what I said?

19 MS. PEASHA: Certainly.

20 MS. SCOTT: Okay. Okay --

21 MS. PEASHA: Do you have a copy -- is
22 this copy is this an --

23 MS. SCOTT: No.

24 MS. PEASHA: Okay.

25 MS. SCOTT: The project owner is

1 required to submit a monthly compliance report to
2 the CPM. The monthly compliance report consists
3 of all the construction activities that have
4 occurred on the project for the previous month.

5 Like if they start construction in June
6 and in July, by the 15th of July, they will submit
7 a document to me telling me all the construction
8 activities that have occurred during June. And
9 also in that document they will tell me the
10 activities they plan to participate in or that
11 would occur on the project for August and
12 September. And that's what I was trying to
13 relate.

14 MS. PEASHA: That's what I believed that
15 you said.

16 MS. SCOTT: Yes, yes.

17 MS. PEASHA: The acronym CPM, also is an
18 acronym for critical path method, which
19 construction workers use to do just what you say.

20 MS. SCOTT: Uh, uh-huh.

21 MS. PEASHA: And what they do is to keep
22 their equipment and their managers, sub-
23 contractors in line, they also plan out in
24 previous weeks and months ahead to stay on
25 schedule to keep that -- to keep on schedule

1 primarily and to keep everybody so that they're
2 doing something. So I wanted to clarify, so there
3 will be a critical path method distributed by the
4 construction manager, is it?

5 MS. SCOTT: It, it, the construction
6 manager may put that document together. But the
7 project owner will submit it to the CPM. I'd like
8 to state that the Energy Commission staff holds
9 the project owner responsible for any, for
10 compliance with any conditions of certification.
11 So they may have other sub-contractors or
12 consultants working for them, but all of the
13 documents will come to me from SMUD.

14 MS. PEASHA: Which would be your general
15 contractor?

16 MS. SCOTT: Yeah, SMUD is the project
17 owner.

18 MS. PEASHA: Right.

19 MS. SCOTT: Yeah.

20 MS. PEASHA: So they are general on it?

21 MS. SCOTT: Yes. Okay, and CPM stands
22 for Compliance Project Manager, that's the way I'm
23 using it.

24 MS. PEASHA: I understand that too, but
25 it also is an acronym for critical path method for

1 construction sites. I have no further questions.

2 HEARING OFFICER SHEAN: Okay, anything
3 from the Applicant?

4 MR. COHN: No, we have nothing.

5 HEARING OFFICER SHEAN: Thank you Ms.
6 Scott.

7 PRESIDING MEMBER PERNELL: Thank you Ms.
8 Scott.

9 HEARING OFFICER SHEAN: All right, now
10 we will move to visual resources. And the SMUD
11 witnesses.

12 MS. LUCKHARDT: Okay, for visual
13 resources, the Applicant is going to have quite a
14 group here available. We have Kevin Hudson and
15 Scott Flake, who were sworn previously and
16 testified yesterday. And we are also calling Tom
17 Priestley and Wendy Haydon from the visual
18 resource consultants. And I'm going to go through
19 their testimony and get that entered into the
20 record. And then they will be available for
21 questions. So Mr. Priestly and Ms. Haydon, do you
22 have a copy of Applicants testimony on visual
23 resources in front of you?

24 DIRECT EXAMINATION

25 MR. PRIESTLEY: Yes.

1 MS. HAYDON: Yes.

2 MS. LUCKHARDT: And you guys, I think
3 you have a recorders mic. Kevin, if you could
4 move the --

5 UNIDENTIFIED SPEAKER: We might want to
6 move the amplifier mic over to the end.

7 MS. LUCKHARDT: -- that mic down. Oh,
8 it's taped down.

9 UNIDENTIFIED SPEAKER: It's taped down?

10 MS. LUCKHARDT: Then should I talk loud
11 and you take mine? And was this testimony
12 prepared by you or at your direction?

13 MS. HAYDON: Yes.

14 MS. LUCKHARDT: And do you have any
15 corrections to your testimony to make today?

16 MS. HAYDON: No.

17 MS. LUCKHARDT: And is this testimony
18 true and correct to the best of your knowledge?

19 MS. HAYDON: Yes it is.

20 MS. LUCKHARDT: Thank you. We have no
21 specific questions for our witnesses this morning.
22 We have come to agreement with Energy Commission
23 staff on the conditions that they have included in
24 their filing of March 12, 2003 on visual
25 resources. And so our witnesses are available for

1 questions. And I don't believe we need to
2 summarize unless the Committee would like us to
3 summarize.

4 HEARING OFFICER SHEAN: No, but at least
5 let's go through the ceremony of seeing if there
6 is objection to qualifying Ms. Haydon and Mr.
7 Priestly as experts? Hearing none, they are so
8 qualified. And is there objection to the
9 admission of the visual resources testimony of the
10 Applicant? Hearing none it is admitted.

11 All right, in the Pre-Hearing
12 Conference, Ms. Peasha had requested that the
13 Applicant witnesses be available and so with that,
14 Ms. Peasha, if you have questions?

15 CROSS-EXAMINATION

16 MS. PEASHA: Wendy Haydon?

17 MS. HAYDON: Yes.

18 MS. PEASHA: Could you just reiterate
19 the, the rating for the overall visual impact, or
20 sensitivity from KOP2 for me?

21 MS. HAYDON: As I recall, I think it was
22 considered low to moderate. We can look it up for
23 you.

24 REPORTER: Could Ms. Haydon speak into
25 the shorter mic please?

1 MS. HAYDON: I'm sorry, what?

2 HEARING OFFICER SHEAN: You have to
3 speak into the reporters microphone.

4 PRESIDING MEMBER PERNELL: We just ask
5 you to speak up as loud as possible. That way
6 we'll get it on the record.

7 MS. HAYDON: In the AFC, can you hear me
8 now?

9 PRESIDING MEMBER PERNELL: Yes.

10 MS. HAYDON: Okay. In the AFC we stated
11 on page 811-6 that the view from KOP2 was
12 considered to have a moderately low to moderate
13 visual quality.

14 MS. PEASHA: And that is on the plumes,
15 but just on the towers themselves?

16 MS. HAYDON: This is just talking about
17 the visual quality of -- during the day so there
18 were no plumes when I was out there.

19 MS. PEASHA: Okay. Does any of the
20 witnesses here have testimony regarding the plumes
21 and the visual impact at KOP?

22 MS. LUCKHARDT: I believe that the plume
23 impact analysis was conducted by Ms. Haydon and
24 Mr. Priestly, so they would be available to answer
25 questions on the impacts of that.

1 MR. PRIESTLEY: And I think, uh, the
2 bottom line statement is that our analysis is
3 consistent with that of CEC Staff in the final
4 Staff Assessment, that the plume would not have a
5 significant impact on views, either from KOP2 or
6 elsewhere in the project area.

7 MS. PEASHA: In the AFC Supplement B,
8 were there alternatives in the visual impact if
9 there was a different system used such as the dry
10 cooling system made by, I believe, made by one of
11 your witnesses?

12 MS. LUCKHARDT: Are you asking us as to
13 whether there was an assessment done?

14 MS. PEASHA: Yes.

15 MS. LUCKHARDT: Of dry cooling, was that
16 the ?

17 MS. PEASHA: On the dry cooling system,
18 if that would be a less impact on the visible
19 sensitivities from KOP2?

20 MS. HAYDON: Kathy, there is no
21 reference to dry cooling in Supplement B.

22 MS. PEASHA: Okay, I might have the
23 wrong one here then. Is it, okay, perhaps --

24 PRESIDING MEMBER PERNELL: Perhaps you
25 can just answer the general question. I think if

1 there was a -- have you done any analysis on dry
2 cooling, and if so, what effect would it have on
3 the visual plume, I think is the question?

4 MS. PEASHA: That's exactly what I'm
5 getting at.

6 MS. HAYDON: The visual discussion in
7 it's set 1E, discuss the air cooled condenser.
8 And it talked about the appearance of the air
9 cooled condenser, it did not discuss plumes.

10 MS. PEASHA: Were there any discussions
11 in your testimonies for a wet/dry cooling tower?

12 MS. HAYDON: The hybrid system was also
13 evaluated in set 1E. And it was determined that
14 the visual impact would have somewhat of a less
15 impact than the air cooled system because it would
16 be shorter.

17 MS. PEASHA: Do you have an estimated or
18 guesstimated difference in the impact?

19 HEARING OFFICER SHEAN: Let's make sure
20 we're talking about -- what it is we're talking
21 about.

22 MS. PEASHA: The difference between the
23 cooling system that they are going with and the
24 wet/dry.

25 HEARING OFFICER SHEAN: Okay, sure.

1 There is the physical cooling system itself, okay.
2 Which would be the visual impact of the hardware.
3 And then you have been discussing at the same
4 time, the visual impact of the plume. Now, with a
5 dry cooling system, there is no plume from the
6 cooling system itself.

7 There would be somewhat of a plume from
8 the exhaust stack for other reasons. And so I
9 just want to know whether or not you're talking
10 about the structures, the cooling structures
11 themselves or the plume?

12 MS. PEASHA: To my understanding, there
13 would be some plume from the wet/dry cooling
14 system.

15 HEARING OFFICER SHEAN: Okay.

16 MS. PEASHA: And that's why I asked
17 that, if that is not true?

18 HEARING OFFICER SHEAN: Well, then let's
19 have them answer that question, because I just
20 want to make sure we're talking about the plume
21 effect, as opposed to the structure itself.

22 MS. HAYDON: Okay, there is no plume
23 from the air cooled condenser, but there is, would
24 be a plume from the hybrid, which I think is what
25 you're asking.

1 MS. PEASHA: So there are two different
2 opinions of overall visual sensitivity depending
3 on which, what kind of cooling system you used?

4 MS. HAYDON: The visual sensitivity is
5 the same. We evaluate the physical structures.

6 MS. PEASHA: Okay, just the visual
7 structures, okay.

8 MS. HAYDON: Okay. And then the plume
9 is evaluated separately.

10 MS. PEASHA: I object to the fact that a
11 visual impacts and sensitivities from all areas
12 are bifurcated in two different reports. When you
13 talk about visual sensitivity and visual impacts,
14 you are talking about one thing, visual. And for
15 them so do a report on visual impacts of the
16 towers and visual impacts of the plumes when
17 overall it's a visual impact, I believe that one
18 report should have been reported on.

19 MS. LUCKHARDT: I don't believe, Mr.
20 Shean that that's what has occurred, at least on,
21 with the Applicants information. We prepared an
22 application for certification. And then as you
23 know, and is typical, you have amendments and then
24 you have responses to data requests from staff.
25 And what they are going through is their analysis.

1
2 And I believe that our visual experts,
3 and we can ask them this directly analyzed the
4 visual impact of the whole project. And would
5 have analyzed the impacts of each cooling system
6 entirely.

7 I don't think you could analyze the
8 plume separate from the physical structure of say,
9 an air cooling system. You have to look at each
10 system separately to analyze the visual impact of
11 the whole thing. And I believe that's what our
12 witnesses did.

13 HEARING OFFICER SHEAN: Okay,
14 traditionally Energy Commission does the
15 following, they look at the setting without the
16 power plant, anticipating a power plant will go in
17 there and they look at the, essentially the
18 qualities of that setting into which the power
19 plant will be placed. And make a judgement with
20 respect to the visual character that is already
21 there, both sort of in the foreground as well as
22 in the background.

23 Then, there is a separate analysis of,
24 when you add all the equipment in there, what is
25 the effect going to be from locations that can see

1 it? Recently, at least the Energy Commission has
2 begun evaluating separately, the additional impact
3 of the visible plume from both the cooling towers
4 and if it's appropriate also the exhaust stacks
5 from the facility.

6 So that is at least the way our review
7 goes, so that we would want to know, because the
8 plume from the cooling towers is not always
9 visible, or let me say, at times it is more
10 visible than at other times and those are
11 meteorological conditions to capture what is the
12 typical case and then what is the worst case.

13 So if you can operate within that
14 structure, we could get information that probably
15 is going to enlighten the Committee and the
16 Commission.

17 MS. PEASHA: Okay, the only other
18 question I have is for the Applicant is, did the
19 visual impact of Rancho Seco's towers have
20 anything to do with the impact that they made
21 regarding the new towers that are being built out
22 there for the new plant?

23 MS. HAYDON: Rancho Seco is existing, so
24 we considered that the existing environment. But
25 in the cumulative impacts discussion, the presence

1 of Rancho Seco including the parabolic towers and
2 other projects planned in the area are all
3 considered in the cumulative impacts analysis. So
4 yes, Rancho Seco was considered.

5 MS. PEASHA: Are you aware that the
6 towers at Ranch Seco plant are no longer needed or
7 have any significance being there anymore
8 according to the NRC?

9 MS. HOLMES: Yes, I was aware that it's
10 been decommissioned.

11 MS. PEASHA: So in other words, the
12 visual towers of Rancho Seco could be imploded and
13 they would no longer be compared with the impact
14 of the visuals of the new towers.

15 MS. HOLMES: Well, I can't speak to
16 whether SMUD would implode --

17 MR. HUDSON: I can speak to the issue of
18 the cooling towers at Rancho Seco. They are
19 425-feet tall and 325-feet wide at the base. The
20 situation with the towers is that there are no
21 current funds to demolish the towers anytime in
22 the near future or the future.

23 MS. PEASHA: What is the -- what would
24 your estimated cost of removing the towers?

25 MR. HUDSON: I don't have a cost? I'd

1 be guessing and I can't guess on something like
2 that.

3 MS. PEASHA: Is SMUD staff still
4 required to be out there because of those towers?

5 MS. LUCKHARDT: You can answer it if you
6 know the answer.

7 MR. HUDSON: SMUD Staff is not out there
8 because of the towers. They're still currently
9 decommissioning the nuclear power plant, yes.

10 MS. PEASHA: Is SMUD now in control of
11 the area of Rancho Seco Power Plant or is the NRC
12 still in charge of what goes on out there?

13 MS. LUCKHARDT: You can answer if you
14 know the answer. I don't know what the relevance
15 is as to whether the NRC still has regulatory
16 authority over that facility or not. I believe
17 they do because the spent fuel is still there. So
18 that's my understanding, but I don't know if these
19 witnesses are aware of the Rancho Seco status.

20 HEARING OFFICER SHEAN: Well I thought
21 the words were just about out of his mouth.

22 MS. LUCKHARDT: If you have the answer,
23 please.

24 MR. HUDSON: SMUD is still in control of
25 the industrial area out that and is required to

1 report to the Nuclear Regulatory Commission on
2 activities that are still ongoing out there, yes.

3 MS. PEASHA: Has the Nuclear Regulatory
4 Commission said that the towers are no longer
5 justified to be out there. That they could come
6 down to your knowledge?

7 MR. HUDSON: I wouldn't know about
8 that.

9 HEARING OFFICER SHEAN: Ms. Peasha, You
10 had asked a hypothetical question that didn't
11 quite get answered as a hypothetical. You had
12 asked if the towers were not there, would whatever
13 visual degradation you apply in your analysis
14 because of the presence of the towers, would that
15 visual degradation be reduced, either measurably
16 or significantly?

17 MS. HAYDON: Well, speaking right off
18 the top of my head and from my memory of being out
19 there, I would say that if Rancho Seco wasn't
20 there, the impact of putting a power plant out
21 there would probably be, the visual impact, would
22 probably be greater than if Rancho Seco was there.
23 I can't really confirm that it would be a
24 significant impact. We'd, you know, we'd need to
25 go out there and really think about and evaluate

1 the terrain and the landscape.

2 HEARING OFFICER SHEAN: Okay, I'm going
3 to just move this thing because it makes it so I
4 can't hear.

5 MS. PEASHA: Wendy, have you seen
6 pictures of the overall impact and simulated views
7 with Rancho Seco in the background?

8 MS. HAYDON: Yes. I took the photos.
9 I'm the one that went out and took the photos for
10 the simulations.

11 MS. PEASHA: And did, and do you in your
12 opinion believe that the impact would be less
13 significant, I mean would be more significant to
14 the visual impact if the towers of Rancho Seco
15 were not present?

16 MS. LUCKHARDT: I believe she indicated
17 that she did not analyze that and I believe she
18 answered that question in response to Mr. Shean.

19 MS. PEASHA: I believe she also answered
20 that she took the pictures out there. So there is
21 no way without taking pictures of those that she
22 did not see those towers.

23 MS. LUCKHARDT: I guess I'm
24 misunderstanding your question. I thought you
25 were asking, roughly the same question Mr. Shean

1 had previously asked. So maybe if you restate it,
2 we'll understand it.

3 MS. PEASHA: I actually asked her -- she
4 said she'd have to go out there and look at them.
5 She just told me that she's the one that took the
6 photographs.

7 HEARING OFFICER SHEAN: All right, why
8 don't you just rephrase your -- or repeat your
9 question and let's see if we can.

10 MS. PEASHA: Wendy, have you
11 seen -- since you were the photographer out there
12 for those and for the simulated plant. Did you or
13 did you not, notice the Rancho Seco Power Plant
14 towers? And do they make any significant --
15 answer that first, that's fine.

16 MS. HAYDON: Yes I did go out there.
17 And yes I did take the photos and yes I did see
18 the Rancho Seco plant and they are shown in the
19 photos.

20 MS. PEASHA: In your opinion, if those
21 were not there, would the impact of the visual
22 towers for CPP be more or less significant for
23 sensitivity from the different KOP's.

24 MS. LUCKHARDT: That's been asked and
25 answered. That was in response to your question,

1 Mr. Shean.

2 HEARING OFFICER SHEAN: Well, actually
3 it wasn't. She asked with respect to the project
4 towers, as opposed to the project itself.

5 MS. HAYDON: Okay. But what we
6 evaluated is the existing, against the existing
7 condition, which Rancho Seco is out there. So now
8 you are asking me to pretend that Rancho Seco is
9 not there. And then tell you what I think the
10 impact might be?

11 MS. PEASHA: I'm just asking your
12 opinion if you think that the impact, the visual
13 impact --

14 MS. HAYDON: I just wanted to clarify
15 that that's what you were asking?

16 MS. PEASHA: Yes, thank you.

17 MS. HAYDON: I didn't evaluate that, but
18 you're asking my opinion. And I think I just a
19 few minutes ago said that if the -- if Rancho Seco
20 wasn't there, I think there would -- the landscape
21 would appear more undisturbed, so if the project
22 was going to out there, there would probably be
23 more visual contrast to the landscape.

24 MS. PEASHA: Did you take the, the, the
25 nighttime pictures also?

1 MS. HAYDON: Yes I did.

2 MS. PEASHA: I have no further
3 questions.

4 HEARING OFFICER SHEAN: Okay, I'd like
5 to get it clarified, since it was raised at the
6 Pre-Hearing Conference, what the night lighting
7 protocols for construction are going to be?

8 MR. FLAKE: I'll try to answer that
9 question. The construction contractor will set up
10 the lighting situation both in the plant
11 construction area and parking and the lay down
12 areas. Lighting is used on construction for both
13 worker safety, while they're operating during
14 nighttime and early morning conditions. And also
15 for security purposes.

16 We do not have a contractor selected for
17 this project yet. But based on my experience on
18 past projects, there would generally be some
19 lighting available during the nighttime through
20 the evening for security purposes in the lay down
21 area.

22 And this would be primarily for security
23 of the equipment that's in the lay down area.
24 Security of people working during the evening
25 hours. And for any, perhaps deliveries that come

1 during the evenings to get them safely off the
2 road and into the construction site so that they
3 can lay-up during the evening.

4 MS. PEASHA: I would like to rebuttal on
5 that if I may. During -- or in the report it says
6 that there would be construction during the
7 daytime and there would be no construction or
8 personnel other than maybe security for the CPP
9 Plant. You have no mention or do not have the
10 information that there are even was, or is going
11 to be a lit area on the lay down area. Is that
12 now changed?

13 MR. FLAKE: I believe the work hours
14 were stated for noisy work between 6 a.m. and 8
15 p.m. and that is, those hours are stated in the
16 conditions of certification.

17 MS. PEASHA: Would that require
18 the -- it does not state in there though, that
19 there are lights at the lay down area. At this
20 time, this report, when the FSA came out, there
21 was no conditions of lighting for the lay down
22 area, has that changed?

23 MR. FLAKE: Can we just take one moment
24 to look up some documentation?

25 HEARING OFFICER SHEAN: Yes.

1 (Off the record.)

2 MR. FLAKE: Visual VIS-4 in the Final
3 Staff Assessment is the guidance that we will be
4 using for our construction lighting. And we'll be
5 complying with this conditions of certification.

6 MS. PEASHA: Which is on what?

7 HEARING OFFICER SHEAN: What page is
8 that?

9 MR. FLAKE: 4.12-44.

10 MS. PEASHA: Paragraph?

11 MR. FLAKE: The entire condition, VIS-4,
12 Construction Lighting is the title.

13 HEARING OFFICER SHEAN: Ms. Peasha,
14 before you --

15 MS. PEASHA: Am I, am I --

16 HEARING OFFICER SHEAN: -- Ms. Peasha
17 before you proceed. I need some foundation
18 information for the answers that he's giving to
19 fit into a context with the original question that
20 I started on this. If I understood you correctly,
21 you do have an expectation of construction taking
22 place other than, well, let me just say, how many
23 shifts of construction do you anticipate in the
24 project?

25 MR. FLAKE: The actual number of shifts

1 have not been determined. We'll work with the
2 contractor for the exact work hours and if there
3 are second shift requirements.

4 HEARING OFFICER SHEAN: Okay. Are there
5 any hours of the day that you do not anticipate
6 construction taking place?

7 MR. FLAKE: That we do not?

8 HEARING OFFICER SHEAN: That you do not,
9 right, that would be excluded, or could it
10 potentially be all 24 hours in any given day?

11 MR. FLAKE: I do not expect 24 hour
12 shifts at this site. There could be a potential
13 for a second shift, but again, that relates to the
14 construction schedule, which has not been
15 determined with the contractor.

16 But typically even the regular workday,
17 we would anticipate to be 8 to 10 hours per day.
18 And during certain times of the year, it's dark
19 during the morning and the evening, so there would
20 be lighting, even if there was just a one shift
21 operation. And then through the night for
22 security purposes. Much , much less lighting
23 however, after the workday ends.

24 HEARING OFFICER SHEAN: And did I also
25 understand you to testify that there may be

1 evening deliveries of supplies and material for
2 construction.

3 MR. FLAKE: At times, long haul truck
4 material is being sourced for this project across
5 the nation and actually globally, trucks will
6 arrive during evening hours or after the normal
7 workday, it would be received by security at the
8 site and then parked on the site.

9 HEARING OFFICER SHEAN: And it's your
10 expectation that for both the construction site
11 and the lay down site, the Applicant would be
12 complying with provisions of VIS-4?

13 MR. FLAKE: That is correct.

14 MS. PEASHA: To my knowledge, they
15 stated they did not have any lights prepared for
16 the lay down area and they would not know until
17 contractors were out there. They also state in
18 their traffic and transportation that the workers
19 would be arriving and leaving so that they would
20 not get into the general commute traffic and so
21 this night construction that they are bringing up
22 right now is not -- is new to me and has not been
23 brought up.

24 HEARING OFFICER SHEAN: Okay. Well,
25 eventually when we get to the Staff, we'll see if

1 the Staff contemplated this when they prepared
2 VIS-4, or if it's new to them. Do you have any
3 additional questions of the Applicant?

4 MS. PEASHA: No, not at this time.

5 HEARING OFFICER SHEAN: All right, thank
6 you. I have a couple more. Does your testimony
7 include your assessment that the visual impact of
8 the project plume from the cooling towers will be
9 insignificant?

10 MS. HAYDON: It was less than
11 significant.

12 HEARING OFFICER SHEAN: Less than
13 significant. And do you know the linear length of
14 the cooling towers if both phases of the project
15 are constructed?

16 MR. FLAKE: Each cooling tower is
17 approximately 350-feet long. So if both phases,
18 for both phases they would each have one cooling
19 tower, so combined, about 700-feet long.

20 HEARING OFFICER SHEAN: All right. And
21 what do you understand is the, let's say, modeled
22 worst case height and length of the plume during
23 the meteorological conditions that are most
24 conducive to the visual plume?

25 MS. HAYDON: Okay, you're asking for the

1 dimensions of the plumes?

2 HEARING OFFICER SHEAN: Approximately.

3 MS. HAYDON: Okay, the tenth percentile
4 plume from a cooling tower for both phases would
5 be about 272-feet long, 384-feet tall and 154-feet
6 wide.

7 HEARING OFFICER SHEAN: All right. Can
8 you just explain to the committee how in your
9 professional opinion for that plume that occurs
10 ten percent of the time, which is relatively
11 infrequently, you assess or conclude that it's
12 visual impact is less than significant? Give us
13 your, essentially qualitative judgement of why
14 that is less than significant?

15 MS. HAYDON: Just a moment.

16 MR. PRIESTLEY: So a number of factors
17 go into the assessment. One is the understanding
18 that this is an occurrence of relatively short
19 duration. It takes place within a relatively
20 limited hours during the year. So it's an
21 intermittent thing.

22 It's not like this plume is there, a
23 plume of that size is there all the time. The
24 hours within which it occurs are relatively
25 limited and then you need to evaluate to what

1 extent is it blocking highly valued views, to what
2 extent does it effect the overall character and
3 quality of the environment.

4 And given the conditions in this area,
5 both our assessment and that of CEC Staff are in
6 agreement, that although the presence of the
7 plume, yes, certainly you would be able to see the
8 plume, and certainly it would have some adverse
9 effect on the setting, but those effects would not
10 be so substantial in that particular context to
11 constitute a significant effect.

12 HEARING OFFICER SHEAN: Did the staff
13 have any questions of the Applicant witness? Do
14 you have any re-direct?

15 RE-DIRECT EXAMINATION

16 MS. LUCKHARDT: I guess I just want to
17 be clear. It's a mine field. I guess I just have
18 one question regarding work hours and I just want
19 you to clarify what you anticipate as far as the
20 workers and lighting on sites and what you
21 anticipate for work beyond a standard shift, or if
22 you, if there's information from the AFC or
23 something that would help to clarify that?

24 MR. FLAKE: The final shifts have not
25 been settled upon. They will be determined by the

1 contractor. We anticipate a single shift
2 operation, however, my past experience indicates
3 that during certain times of the project there may
4 be some smaller activity on a second or partial
5 shift in the evening.

6 During the winter hours, obviously there
7 is less light, so lighting is used during the
8 morning and evening hours for worker safety and a
9 very, very, small amount of lighting is required
10 for security purposes during the night. Again,
11 that's past experience.

12 I don't -- we have not set in place the
13 exact requirements with the contractor for this
14 project. But I would anticipate they would be
15 very similar.

16 MS. LUCKHARDT: Okay, I have nothing
17 further.

18 HEARING OFFICER SHEAN: If SMUD were
19 under what we might call a time crunch in your
20 mind, to construct this power plant, would you
21 anticipate that under those circumstances you
22 would be asking the contractor to finish it with
23 certain, either time, or let me say, performance
24 incentives for time that would add to the shifts
25 that you've contemplated here?

1 MR. FLAKE: There are a number of ways
2 the that you can increase the number of, you know,
3 the work hours are fixed for the project. And
4 then based on your construction schedule, the
5 contractor can choose to extend a single shift
6 day, they can extend the number of days worked
7 during the week, or they can potentially add a
8 second shift. And that's really up to the
9 discretion of the contractor.

10 HEARING OFFICER SHEAN: You have not yet
11 hired a contractor for this, is that correct?

12 MR. FLAKE: Correct.

13 HEARING OFFICER SHEAN: Do you have,
14 have you prepared BID specifications for potential
15 contractors?

16 MR. FLAKE: We have.

17 HEARING OFFICER SHEAN: And do you have,
18 with a time limit, such as a date on the
19 calendar, or some particular amount of time that
20 you have for the completion of the project?

21 MR. FLAKE: We have developed a
22 preliminary construction schedule that we provide
23 to the contractors that meets the District's
24 requirements.

25 HEARING OFFICER SHEAN: Okay, within

1 that schedule as you see it, does that contemplate
2 multiple shifts, or the single shift and the
3 occasional multiple shifts as you earlier
4 described?

5 MR. FLAKE: It contemplates a single
6 shift that's a long single shift, I believe it
7 doesn't contemplate a second shift at this time.
8 However, you know, on , it could happen.

9 HEARING OFFICER SHEAN: Well, let me ask
10 it this way. Is whether or not it requires a
11 second shift dependent upon when and first of all,
12 if but assuming you do receive certification, when
13 that would be? Could the specifications change
14 depending upon when certification occurs, if it
15 occurs?

16 MR. FLAKE: I'm sorry, I didn't
17 understand the question.

18 HEARING OFFICER SHEAN: Is within your
19 BID specification, in your mind, is the amount of
20 time that is currently contemplated for the
21 construction of the project, dependent upon when
22 certification would occur, if it does from the
23 Commission?

24 MR. FLAKE: Our construction schedule
25 does not depend on when certification is granted,

1 if it's granted by the Commission. It's fixed and
2 it starts when we allowed and permitted to start.
3 Is that your question?

4 HEARING OFFICER SHEAN: I think so. So
5 the follow-up to that then, is if certification
6 occurs later, let's say, than your originally
7 desired date of June, 2003, does that mean you
8 shift the whole construction schedule from that
9 point, or you squeeze a greater amount of work
10 into less time?

11 MR. FLAKE: A combination of both.

12 HEARING OFFICER SHEAN: All right.
13 That's all I have. Thank you very much, that will
14 address --

15 MS. PEASHA: Excuse me Mr. Shean, I do
16 believe that they -- can I have one moment to
17 look?

18 HEARING OFFICER SHEAN: -- yes.

19 RECROSS-EXAMINATION

20 MS. PEASHA: Let me just direct this
21 question to Kevin Hudson. Kevin, doesn't your
22 statement on construction limit daylight hours for
23 the safety of the commuting traffic. Is there, I
24 have no known information about night
25 construction.

1 I believe the safety mitigation was
2 prepared so that construction traffic would not
3 interfere with commuting traffic and that's why
4 there was only going to be day shift construction
5 out there.

6 HEARING OFFICER SHEAN: Ms. Peasha, can
7 I --

8 MS. PEASHA: Do you --

9 HEARING OFFICER SHEAN: -- Ms. Peasha
10 can I ask you to hold your question until we get
11 to that traffic and transportation segment.
12 Because I'm at least able to distinguish that.
13 And the topic of traffic and transportation and
14 peak travel and everything else like that is
15 germane to traffic and transportation.

16 So I'm going to just ask you to hold
17 that question. We will cover that topic area.
18 And obviously the information we've received today
19 begins to open up that area. But it is in the
20 traffic and transportation area, all right? If
21 there anything further then? All right, thank
22 you, your official witnesses are excused.

23 Do you have some visual people here?

24 MS. HOLMES: We have visual witnesses,
25 but I think some of us would like a break before.

1 HEARING OFFICER SHEAN: All right, some
2 of us get a break until 11:00 then.

3 (Thereupon a recess was taken.)

4 HEARING OFFICER SHEAN: Back on the
5 record. And the Committee would like the Staff
6 witnesses who prepared the visual and visual plume
7 sections of the FSA to be -- have you already been
8 sworn in, were you here this morning when people
9 were sworn in? Okay, why don't you go ahead with
10 the mechanics of getting that testimony in.

11 DIRECT EXAMINATION

12 MS. HOLMES: Thank you, Staff's witness
13 in the area of visual resources is Michael
14 Clayton. And Staff's witnesses in the area of
15 visual plumes are Dale Edwards and Will Walters.
16 And they have both been sworn. Let me start with
17 Mr. Clayton, if he's ready. Mr. Clayton, did you
18 prepare the visual resources testimony that's
19 contained in the FSA?

20 MR. CLAYTON: Yes.

21 MS. HOLMES: And was a statement of your
22 qualifications included in the FSA?

23 MR. CLAYTON: Yes.

24 MS. HOLMES: He needs a recording
25 microphone. And did you also prepare changes to

1 the visual resources conditions of certification,
2 which were filed on March 12th?

3 MR. CLAYTON: Yes. And do you have any
4 additional changes to your testimony at this time?

5 MR. CLAYTON: Yes, there are two changes
6 to VIS-3, which starts on page 53 of the
7 supplemental testimony. There are two language
8 changes, which I'd like to read in, which we have
9 also received -- have arrived at agreement with
10 the applicant on these changes. The first change
11 is again, on page 53, under the category C, number
12 1, that paragraph, that item list number is being
13 changed to read as follows. Tree species that are
14 native to the central valley, fast growing and
15 expected to reach the greatest height at maturity
16 for site conditions. And that replaces the
17 existing item 1, item C1.

18 The second change, is on page 54, the
19 following page. Under the same condition and it
20 is the paragraph before the heading, middle of the
21 page, reading verification in that previous
22 paragraph.

23 The change is as follows in the middle
24 of the paragraph, where it starts however, the new
25 change reads as follows. For the area West of the

1 power plant site, the planting must be completed
2 by the end of the first season that is optimal for
3 planting during the first year after the start of
4 site mobilization or other CPM approved time
5 frame. And that's the end of the changes.

6 MS. PEASHA: And that's the planting of
7 the visual impacts?

8 MR. CLAYTON: That's the planting of the
9 landscaping for visual mitigation.

10 MS. HOLMES: And with those changes and
11 corrections, are the facts in your testimony true
12 and correct to the best of your knowledge?

13 MR. CLAYTON: Yes.

14 MS. HOLMES: And do the opinions in your
15 testimony represent your best professional
16 judgement?

17 MR. CLAYTON: Yes.

18 MS. HOLMES: Thank you. And now I'd
19 like to turn to the visible plumes testimony. Mr.
20 Edwards and Mr. Walters, was that testimony
21 prepared by you or under your direction

22 MR. WALTERS: Yes.

23 Mr. EDWARDS: Yes it was.

24 MS. HOLMES: And are you also including
25 in that the changes to the visible text and

1 conditions of certification that were filed on
2 March 12th?

3 MR. WALTERS: Yes.

4 MR. EDWARDS: Yes.

5 MS. HOLMES: And was a statement of your
6 qualifications included in the FSA?

7 MR. WALTERS: Yes.

8 MR. EDWARDS: Yes.

9 MS. HOLMES: And do either of you have
10 changes or corrections to those pieces of
11 testimony.

12 MR. WALTERS: No.

13 MR. EDWARDS: No.

14 MS. HOLMES: Are the facts contained in
15 your testimony true and correct to the best of
16 your knowledge?

17 MR. WALTERS: Yes.

18 MR. EDWARDS: Yes they are.

19 MS. HOLMES: And do the opinions
20 contained in your testimony represent your best
21 professional judgement?

22 MR. WALTERS: Yes.

23 MR. EDWARDS: Yes they do.

24 MS. HOLMES: Thank you. And now I'd
25 like to ask the Committee, perhaps, for direction

1 whether or not they would like to have separate
2 summaries prepared for the visual resources
3 testimony and visible plumes testimony, or if you
4 would just prefer to have one summary. Or if you
5 would just like to move directly to questions?

6 HEARING OFFICER SHEAN: I think we'll
7 move directly to the questions, since they were
8 not listed for direct testimony? If there
9 objection of the qualification of the witnesses as
10 experts? Hearing none they are so qualified.

11 Is there objection to the admission of
12 the amended testimony on visual resources and
13 visible plumes? Hearing none, it's admitted.

14 I'd like the Committee here to lead this
15 off because I just want to ask a couple of
16 questions. Were you present at the testimony
17 earlier this morning provided by the SMUD
18 witnesses with regard to the number and timing of
19 shifts, including information about deliveries by
20 long-haul trucks, et cetera in evening hours?

21 MR. CLAYTON: Yes I was.

22 HEARING OFFICER SHEAN: Was your
23 testimony on visual resources and the conditions
24 that you have proposed made in contemplation of
25 that information?

1 MR. CLAYTON: Yes it was made
2 in -- under the assumption that there would be
3 some degree of night time construction.

4 HEARING OFFICER SHEAN: Would you have
5 any different recommendations for conditions if
6 there were multiple shifts, including an evening
7 shift?

8 MR. CLAYTON: No. Our conditions
9 currently account for that.

10 HEARING OFFICER SHEAN: Okay, with
11 respect to the visible plume, just sort of cut to
12 the chase here, what in your professional opinion
13 supports your conclusion that these visible plumes
14 do not represent a significant visual impact?

15 MR. EDWARDS: Based on Staff methodology
16 for doing the analysis of visible plumes from
17 cooling towers or from heat recovery steam
18 generator stacks, in the case of this -- or in
19 this particular case, the heat recovery steam
20 generator stacks did not produce a plume that was
21 greater than 10 percent in frequency and
22 therefore, no further detail analysis was done for
23 those.

24 However, for the cooling tower plumes,
25 they did exceed that ten percent frequency at 18.5

1 percent of the seasonal daylight, no rain, no fog,
2 clear hours, such that we did do a detailed
3 analysis.

4 And the conclusion of that analysis was
5 that from two key observation points, based on the
6 various factors involved in the analysis, which
7 are discussed in the analysis and cover the areas
8 of setting as well as visual change from the
9 project.

10 Staff's result was that the plumes as
11 viewed from these two KOPs, which are at one mile
12 and two mile distant from the project site, based
13 on the visual sensitivity of the viewers as well
14 as the change to the physical environment
15 represented by the addition of plumes, when they
16 exist, was that the plumes, when they do exist,
17 would be co-dominant or less than co-dominant to a
18 subordinate level or distant locations. And as
19 such, overall would be less than significant
20 impact.

21 HEARING OFFICER SHEAN: Staff has
22 proposed a condition called Plume-1, can you state
23 the purpose of that?

24 MR. EDWARDS: In most cases, when Staff
25 recommends a conditions of certification it's done

1 so to reduce to lessen significant an impact that
2 we find to be significant. In this case, however,
3 we did not find the plumes to be significant
4 impact.

5 However, it's been our practice of
6 recent cases and will continue to be from visual
7 resource staff's perspective at least, that we
8 want to ensure that this less than significant
9 impact, is in fact the case for the duration of
10 the project life, such that we recommend these
11 conditions, like this one here in this case.

12 That the cooling towers be designed in a
13 manner that matches the analysis that we did, and
14 the Applicant did as well, for the siting case, so
15 that what actually happens in operation of the
16 project is consistent with what we analyze during
17 the siting case.

18 HEARING OFFICER SHEAN: Now, the typical
19 practice at the Commission is generally to have
20 the verification contain essentially two things,
21 the identification of how the verifying
22 documentation will be presented and a timetable
23 for it's presentation. I notice here that there
24 is a significant amount of substance in the
25 verification. Can you tell me why that is

1 appearing in the verification and not in the
2 condition itself?

3 MR. EDWARDS: It probably would be best
4 if I pulled that up, but I'm going to operate from
5 memory for a moment.

6 MS. HOLMES: Why don't you put it in
7 front of you first.

8 MR. EDWARDS: Hang on a second.

9 MS. HOLMES: Take your time.

10 MR. EDWARDS: One moment.

11 HEARING OFFICER SHEAN: Predominantly
12 the second paragraph.

13 MR. EDWARDS: I think in this case what
14 Staff is attempting to do is that the condition
15 portion, or the verification -- excuse me, the
16 requirement portion of the condition, which is
17 above the verification states the intended goal
18 that we want to see the project cooling towers
19 operate and designed and operated such that plume
20 frequencies would not increase beyond the design
21 as certified.

22 And then everything in the verification
23 is a method of verifying, in fact that that design
24 as specified to us, will meet the goal stated in
25 the requirement portion.

1 And the way that they do this is by
2 submitting the design plans to us, or as it's
3 described here, the project owner shall provide
4 the CPM for review the final design specifications
5 so that we can verify that the design does match
6 the criteria that is established. And within the
7 verification statement in the next paragraph,
8 which are the temperatures and the, temperatures
9 of both the heat rejection rate, as well -- or the
10 exhaust flow as well as the ambient temperatures.

11 HEARING OFFICER SHEAN: Is paragraph two
12 of the verification, the design you think is being
13 certified?

14 MR. EDWARDS: Could you say that again.

15 HEARING OFFICER SHEAN: Paragraph two of
16 the verification, the design of the cooling tower
17 that you believe is being certified?

18 MR. EDWARDS: Right, this is a, this is
19 basically --

20 HEARING OFFICER SHEAN: So that's a yes?

21 MR. EDWARDS: -- yes, this is a
22 description of the parameters that are consistent
23 with the design that was modeled in our analysis.

24 HEARING OFFICER SHEAN: Let me just go
25 back to visual resources again and ask the

1 hypothetical question that was asked by a
2 combination of Ms. Peasha and myself. I'm
3 assuming that the presence of the cooling towers
4 for the Rancho Seco Nuclear Power Plant were a
5 factor in your assessment of the overall visual
6 sensitivity and quality of the area. And what
7 would be your opinion as to the significance of
8 the proposed project, if the Rancho Seco cooling
9 towers were not there?

10 MR. CLAYTON: It is possible that the
11 outcome of the impact analysis would conclude that
12 the proposed project may have a greater impact
13 without those existing towers being there. But,
14 my response actually would be somewhat similar to
15 the Applicants response, in that you would need to
16 make an evaluation of the project, of the existing
17 landscape setting without those structures.
18 You're talking about just the cooling towers being
19 removed or the entire Rancho Seco Facility, that's
20 two different things.

21 If we assume it's just the cooling
22 towers that we're talking about, we still have
23 some degree of industrial features in the
24 landscape and so it would require analysis, it
25 would require simulations and then based on that

1 we'd make a final judgement. But clearly, the
2 cooling towers are a prominent contributing
3 feature to the existing landscape with industrial
4 character and that would be lessened with their
5 removal.

6 PRESIDING MEMBER PERNELL: On the less
7 than ten percent, this is on the plume, and it was
8 stated that it's less than ten percent of the
9 time. What's the time we're talking about, is
10 that eight hours, 24 hours?

11 MR. EDWARDS: The ten percent in total
12 hours for the seasonal period, which is the
13 November through April time frame that Staff uses
14 for it's analysis. In this case, the ten percent
15 represents 293 hours spread across that six month
16 period.

17 HEARING OFFICER SHEAN: And do we
18 understand that ten percent, less than ten percent
19 you said applies to the heat recovery steam
20 generator plume and the cooling tower plume would
21 be approximately 18.5 percent, is that correct?

22 MR. EDWARDS: The cooling tower plume is
23 18.5 percent, right, the -- plume was actually at
24 three percent.

25 PRESIDING MEMBER PERNELL: We're talking

1 about daylight hours?

2 MR. EDWARDS: Yes, I think Will wants to
3 pitch in here.

4 MR. WALTERS: Actually it's daylight
5 hours where the hours where there's already some
6 sort of visible impairment have been taken away.
7 If it's a fog hour, rain hour, where the
8 visibility is less than a certain distance, which
9 in this case, I think we used five miles.

10 We consider those to be already visually
11 impaired hours. So the actual phrase that we use
12 for these particular hours is called seasonal
13 daylight, no rain, no fog, clear hours. And clear
14 is another separate definition which defines the
15 background, essentially the cloud cover that
16 exists during that hour that was modeled.

17 And essentially if the background is
18 about 50 percent, or more clear, then we call that
19 a high contrast hour. Whereas if there are clouds
20 in the background, that would be a low contrast
21 between the plume and the background.

22 CROSS-EXAMINATION

23 MS. PEASHA: Mr. Edwards, could you
24 please turn to appendix A or your visual plumes
25 testimony? Under existing visual setting, could

1 you please read your rating for the overall visual
2 sensitivity for KOP2 and KOP3?

3 MR. EDWARDS: You're talking about the
4 summary page, right?

5 MS. PEASHA: The appendix A, yeah, the
6 visual plume testimony.

7 MR. EDWARDS: Okay, the overall visual
8 sensitivity?

9 MS. PEASHA: The KOP of -- yeah, the
10 visual sensitivity, the overall one.

11 MR. EDWARDS: For both KOP2 and 3?

12 MS. PEASHA: Yes Sir.

13 MR. EDWARDS: The first one, overall
14 visual sensitivity for KOP2, which is a point
15 approximately one mile from the proposed sight is
16 moderate. And the overall visual sensitivity for
17 KOP3 is moderate to high. This is a point that is
18 about two miles from the proposed site.

19 MS. PEASHA: Okay, now could you please
20 turn to appendix VR1 that was prepared by Michael
21 Clayton, who I understand is under your
22 supervision. Is KOP and KOP3, KOP2 and KOP3
23 listed in appendix VR1 the same? The same KOP2
24 and KOP3 are in your appendix A?

25 MR. EDWARDS: The KOPs are the same.

1 MS. PEASHA: Could you please read what
2 Mr. Clayton concluded for overall visual
3 sensitivity for KOP2 and KOP3?

4 MR. EDWARDS: For KOP2, under overall
5 visual sensitivity, he has moderate to high for
6 residents and moderate for motorists. And under
7 KOP3 he has moderate.

8 MS. PEASHA: It is my understanding that
9 these determinations for visual sensitivity is for
10 the existing setting with no consideration of the
11 new power plant, is that correct?

12 MR. EDWARDS: Right, it's as the current
13 status is of the area.

14 MS. PEASHA: So there are two different
15 opinions concerning overall visual sensitivity on
16 the same setting?

17 MR. EDWARDS: Somewhat dissimilar, yes.

18 MS. PEASHA: That would be a yes?

19 MR. EDWARDS: Yes.

20 MS. PEASHA: Why are there two different
21 conclusions, if both of you are looking at the
22 same scene.

23 MR. EDWARDS: Well, this gets to a
24 factor that's involved with the fact that we do
25 have two different kinds of analyses happening

1 here at this point where there is a visual
2 resource analysis, then there's a visible plume
3 analysis. The visual resource analysis is using a
4 slightly different set of factors to arrive at
5 that overall visual sensitivity, than the visible
6 plume analysis uses.

7 MS. PEASHA: Why would you use slightly
8 different analyses? Why wouldn't they be
9 consistent?

10 MR. EDWARDS: Well, the factors in the
11 analysis are somewhat different and the reason for
12 the difference is that in the case of visual
13 resource analysis, which has been done by the
14 Energy Commission Staff for a number of years.
15 For that period of years, there has been a
16 consistent revision over time to improve our
17 analyses, to make more realistic and reasonable
18 findings in every case to the extent feasible.

19 In this particular case, we've reached a
20 point with the plume analysis where we found some
21 changes that were identified as being beneficial
22 to the analysis to improve it's results. And in
23 this case, as well as another siting case and
24 others to come, the new methodology that has been
25 used for the visible plume analysis, has been

1 adopted and it will be, as I say used in other
2 cases.

3 So it is a change in the view of staff
4 and improvement over what we've previously done.
5 However, in the Cosumnes case, this change has
6 only been used, or this new methodology has only
7 been used for the visible plume section and not
8 for the visible resource element as well. But in
9 some future cases, we'll be using it across the
10 board for the visual resource analysis including
11 plumes.

12 MS. PEASHA: But isn't that -- but it is
13 inconsistent to what, to what you're looking at?
14 You've --

15 HEARING OFFICER SHEAN: He's answered
16 that they are inconsistent. I have a question
17 here. Is there any statement or explanation in
18 Staff's testimony, including testimony filed up to
19 Wednesday afternoon, that explains to the
20 Committee and the Commission that a portion of the
21 analysis used for visual resources is now using,
22 or is presented using a methodology that has been
23 superseded, is it in here?

24 MR. EDWARDS: Well it hasn't been
25 superseded in essence, because it's still here.

1 HEARING OFFICER SHEAN: Well you have a
2 better methodology. If I understand your
3 testimony, you've indicated you have a better
4 methodology in appendix B for what you used for
5 the visual plume. And that as a result of a
6 progression in methodologies used by the Staff,
7 you are in the future, going to use the
8 methodology that appears in appendix B.

9 It just so happens that the methodology
10 in the conclusions in appendix A, use an old
11 methodology and have come to a different result in
12 the characterization of the visual sensitivity.
13 My question is, have you explained in any point in
14 the testimony that has been filed for this
15 Committee and the Commission in deciding this
16 particular application that there is that
17 difference and that you are standing by both
18 analyses?

19 MR. EDWARDS: I don't believe we have
20 that in our testimony at this time. But we
21 certainly can provide that as a --

22 HEARING OFFICER SHEAN: Well, you've
23 already provided it in a question by Ms. Peasha,
24 but I guess the question is, why didn't you
25 volunteer that. And since that's argumentative,

1 I'm not going to ask you.

2 (Laughter.)

3 HEARING OFFICER SHEAN: Do you have
4 anything further, Ms. Peasha?

5 MS. PEASHA: Yes I do. If you've used
6 the overall visual sensitive of moderate to high,
7 used by Mr. Clayton in your analysis, taken from
8 my house, would that rating of sensitivity
9 possibly be changed -- be changed, possibly
10 changed your conclusions concerning the
11 significance of the cooling tower plumes?

12 MR. EDWARDS: It may have the potential
13 to do that. I'd have to think of it more
14 carefully and what it actually does. What happens
15 when you bring this combination of factors
16 together, in particular the overall visual change
17 and the overall visual sensitivity, different
18 levels of those factors cause different kind of
19 outcomes in Staff's methodology.

20 It's either definitely significant or
21 definitely not significant. Or it falls into a
22 category of maybe significant. And when it's in
23 that maybe zone, there are extra factors or
24 additional thinking that goes into deciding
25 whether that is in fact a falls to a less than or

1 a significant impact level. And I haven't done
2 that analysis in that way. So I couldn't really
3 give you an answer right on the spot.

4 MS. PEASHA: But that point shows the
5 inconsistency of methodology going on there.

6 MS. HOLMES: That's an argumentative
7 question. If you've got a factual question,
8 that's fine.

9 MS. PEASHA: Okay, okay. According to
10 your resume, Mr. Edwards, you are the Supervisor
11 of the Cultural, Visual and Socioeconomic Resource
12 Unit, is that correct?

13 MR. EDWARDS: Yes.

14 MS. PEASHA: And as the supervisor, I
15 see in your resume that you're responsibilities
16 include overseeing the staff in their analyses of
17 culture, visual and socioeconomic issues, is that
18 correct Sir?

19 MR. EDWARDS: Yes.

20 MS. PEASHA: Your resume states that
21 your duties do not include the preparation of
22 technical analyses, is this correct?

23 MS. HOLMES: Do you want to look at your
24 resume before you answer that question, so you
25 know exactly what it says? We can pull it from

1 the FSA.

2 MR. EDWARDS: That would be helpful.

3 MS. PEASHA: So you --

4 MS. HOLMES: We're waiting. He needs to
5 have it in front of him before he can answer your
6 question.

7 MS. PEASHA: Did he not answer my
8 question? Oh, okay, I'm sorry, I didn't understand
9 that.

10 MR. EDWARDS: It doesn't appear that it
11 specifically -- or it does not state that I do
12 testimony or do analyses in cases on any of those
13 subjects that I supervise. However, my duty
14 statement, which is other than my resume, does say
15 that basically I am responsible for the products
16 that come out of the unit.

17 And on occasion, that means that I have
18 to, whether it's for a resource issue that
19 somebody is not available to actually do the work,
20 or many other reasons that may come up over time,
21 have to take on the responsibility to actually
22 write or perhaps, not even write, but assume the
23 technical testimony level at hearings and other
24 things when people are not available to do so.

25 It's a pretty wide range of stepping in

1 when needed. In this particular case, as I said,
2 we had a revised methodology which was important
3 to start using. And I volunteered basically to
4 step in and do this one.

5 MS. PEASHA: Well, Mr. Clayton, he
6 prepared the visual structure analysis, why
7 couldn't he also perform the plume analysis?

8 MS. HOLMES: Are you asking him why he
9 didn't? Because that's a question I won't to
10 object to.

11 MS. PEASHA: Well he just told me, well
12 okay-- prior to 1998

13 HEARING OFFICER SHEAN: Let's just --
14 you asked the question, do you want to object to
15 it? Why he did not, why Mr. Clayton did not?

16 MS. HOLMES: I objected to why couldn't
17 he. I said if she wanted to ask why he didn't,
18 then I would not have an objection to that
19 question.

20 MS. PEASHA: Okay. I will, let me
21 rephrase that, please then. Prior to 1998, before
22 you were the supervisor of the unit, had you ever
23 prepared technical analysis or testimony in the
24 area of visual resources?

25 MR. EDWARDS: No.

1 MS. PEASHA: I presume that you have a
2 number of technical staff at your hands that could
3 have prepared the visual plume analysis, is that
4 correct?

5 MR. EDWARDS: Partially correct. I have
6 two or three or so staff members that can do a
7 visual impact analysis. The availability of those
8 staff is a totally different question. And in
9 fact, in recent years, Staff availability has been
10 very poor with house, to the extent that we've had
11 to hire outside consultants, which we've also kept
12 extremely busy.

13 Mr. Clayton is one of those. It's my
14 recollection that based on where we were at the
15 time that this analysis was being done, that Mr.
16 Clayton already had his hands full. And that is
17 certainly part of the reason that I volunteered to
18 do this analysis.

19 MS. PEASHA: Mr. Clayton is that true on
20 your aspect?

21 MR. CLAYTON: Yes, in the sense that at
22 the time that the analysis was done, the visual
23 resources methodology dealing with structures was
24 proceeding. We were in a process of revising and
25 refining the plume analysis, the plume

1 methodology.

2 And we were to keep on schedule and on
3 track, it was decided that that structural
4 analysis would go forward and then with, as Dale
5 has alluded to with my other project workload, I
6 was not able to come back in and pick up a plume
7 analysis at a later date.

8 MS. PEASHA: So there was no way that
9 you could have performed the plume analysis as
10 well as the visual structure analysis on this
11 project?

12 MS. HOLMES: At this point, I am going
13 to object. If she wants to challenge the
14 witnesses qualifications, as an expert, that's a
15 legitimate activity she can undertake. But it is
16 not a legitimate question to who Staff could have
17 assigned amongst it's experts to do this kind of
18 analysis.

19 HEARING OFFICER SHEAN: Well I think
20 rather than that, the proper objection would have
21 been, it's been asked and answered. And I think
22 that is correct. That he has already answered it
23 to the extent that he can. He had other --

24 MS. PEASHA: Mr. Edwards, did you agree
25 with the methodology used to determine the

1 significance impacts from the cooling tower
2 plumes?

3 MS. HOLMES: Are you asking him whether
4 he agrees with his own testimony? Is that the
5 criteria you're referring to?

6 MS. PEASHA: Well, I'm asking him that
7 he -- did he prepare the plume analysis because he
8 did not agree with the -- what his technical staff
9 may have provided? Or was there a disagreement
10 between your methodology with you and your staff?

11 MR. EDWARDS: Which methodology are you
12 talking about?

13 MS. PEASHA: About the cooling tower
14 plumes?

15 MR. EDWARDS: The current methodology
16 that I used?

17 MS. PEASHA: Yes.

18 MR. EDWARDS: As I think we've already
19 described, there's been a lot of discussion, in
20 particular over the last couple of years about the
21 plume methodology and it's structure and what
22 elements it should consider. And even back to the
23 ten percent threshold that we've spoken of. All
24 these things are subject to discussion, or have
25 been subject to discussion over time to seek out

1 improvements to the methodology. It is true that
2 not everybody agrees all the time.

3 And there is a desire on my part at
4 least, as a supervisor of the unit to make
5 progress on how we do our work. And I think it
6 would be true or appropriate to say that some
7 people that do visual analysis agree with the
8 methodology changes that I've used in my analysis
9 of this project. And there are others that
10 disagree.

11 MS. PEASHA: But, as a supervisor, you
12 usually do not supply the analyses, is that
13 correct?

14 MR. EDWARDS: It's not desirable. It's
15 not, as I said, it's not something that I do as a
16 rule, but it's certainly something that is within
17 the duties of my job. And when I say it's not
18 desirable, it's because I have many other things
19 I'm doing as well.

20 MS. PEASHA: Okay, in the area of visual
21 assessments, there are two separate analysis by
22 the two separate authors that essentially cover
23 the same topic. That is the visual impacts of the
24 proposed plant. Is that correct?

25 MS. HOLMES: Is that a question?

1 MS. PEASHA: Yes.

2 MR. EDWARDS: Yes.

3 HEARING OFFICER SHEAN: She said is that
4 correct? But that was asked and answered, that
5 was actually one of your first and very good
6 questions. So, if you're going to go somewhere,
7 maybe you can tell me where you're going to go now
8 with the line of questioning?

9 MS. PEASHA: I don't believe that the
10 methodology that the technical staff wanted is
11 what he agreed on.

12 HEARING OFFICER SHEAN: Okay. And he
13 has testified that there are differences of
14 opinion within his unit and he proceeded with the
15 analysis that he provided and not everyone agrees
16 with that.

17 MS. PEASHA: Isn't the more common other
18 project proceedings to combine the impact analysis
19 of the plumes and the building structures together
20 under one assessment?

21 MR. EDWARDS: I think your asking me is
22 it commonly -- that there --

23 MS. PEASHA: Is the more --

24 MR. EDWARDS: It is commonly that
25 they're combined? And yes that's true.

1 MS. PEASHA: Okay, in looking at the
2 visual plumes appendix B, I have some questions as
3 to how you use this analysis to determine your
4 significance in your analyses.

5 MS. HOLMES: These would be questions
6 for Mr. Walters. I believe he's sponsoring
7 appendix B.

8 MR. WALTERS: Actually if it's any
9 determination of significance then it would still
10 be Mr. Edwards.

11 MS. HOLMES: Well, then let's fight for
12 the question.

13 MS. PEASHA: Thank you. Table-3 of
14 appendix B shows various predicted cool tower
15 plume dimensions, is that correct?

16 MR. WALTERS: Yes it is.

17 MS. PEASHA: I was struck at looking at
18 this Table, how big these plumes can be at certain
19 times. Using the model of Staff, that Staff that
20 model used, it is possible at times the visible
21 plumes can be anywhere from 200-feet to 4000-feet
22 tall. Am I reading this correct?

23 MR. WALTERS: Yes you are. And that's
24 the basis of the model. You have to realize that
25 the model assumes all meteorological conditions

1 that occur.

2 So when it's foggy out, or the other 100
3 percent relative humidity conditions, the water
4 has no place to go. So those hours, particularly
5 when you're looking at the all hours category, are
6 generally hours where you don't have a good
7 visible condition. You have an impaired condition
8 already.

9 MS. PEASHA: So referencing to the
10 Rancho Seco towers, at 426-feet high, they could
11 be up to ten times as high as the towers alone, is
12 that correct?

13 MR. WALTERS: That's what the modeling
14 predicts.

15 MS. PEASHA: Looking at Table-9 of the
16 appendix B, this Table shows frequency in hours
17 and number of seasonal days when plumes occur. To
18 help me understand this, the first column, the
19 relative plume size, is the same percentile
20 ranking as the percentile column shown in Table-3,
21 correct?

22 MR. WALTERS: The uh, they're
23 percentiles, but I don't think Table-3 uses all of
24 the same cuts. They go one to five, to ten to
25 fifteen, whereas we have one, five, ten and fifty.

1 But, I mean the percent -- I mean it's a
2 percentile. So that's the only way to say that
3 they're the same.

4 MS. PEASHA: They are -- then that is
5 yes to that?

6 MS. HOLMES: That mis-characterizes his
7 answer.

8 HEARING OFFICER SHEAN: Well, let's get
9 it clear then. Is top one percent the same as top
10 one percent, is top five percent the same as top
11 five percent, is top ten percent same as top ten
12 percent, understanding that one says 50 percent
13 and the other does not say 50 percent?

14 MS. HOLMES: Again, there is a number of
15 top one's, five's, ten's and fifties in Table-3,
16 so let's at least be clear about which ones we're
17 talking about. Mr. Walters.

18 MR. WALTERS: In relation to the data,
19 it's different. Because this particular data set
20 uses the clear, specifies the clear hours. So
21 it's not the same as the other three data sets.

22 MS. PEASHA: Well that would be --

23 MR. WALTERS: It's a further refinement
24 of the analysis. To give you some background, let
25 me tell you how we do the analysis to start with.

1 What we do initially, is we make a determination
2 of whether or not we have what we consider a
3 baseline problem, which requires more analysis.
4 And that is defined as, if plumes are more
5 frequent than ten percent of seasonal daylight, no
6 rain, no fog. Which this case, did go over the
7 ten percent. So additional analyses is performed.

8 That additional analysis uses the clear
9 hour background to determine the impact, or to
10 determine the impact that the visual resource
11 staff determines, because I don't determine
12 impact.

13 What we're looking at then, is we're
14 determining that when we have plumes, that have
15 contrasting background, or essentially a high
16 visual contrast hour, which is essentially what
17 the clear hour is. So it's a further refinement
18 of the data. And so it's actually a slightly
19 different set of data then is provided in Table-3.

20 MS. PEASHA: -- okay, so first, example
21 under the Table-9, row top, five percent,
22 approximately 33 percent of the days between
23 November and April, or about 60 days, I would
24 expect to see a plume in the top five percentile,
25 correct?

1 MR. WALTERS: In a top five percentile
2 from Table-6, yes?

3 MS. PEASHA: From table --

4 MS. HOLMES: She's looking at Table-9.

5 MR. WALTERS: Right, what I'm saying is,
6 when you are taking the size that relates to that
7 percentage, you need to use Table-6, not Table-3,
8 because these are both clear hour Tables.

9 MS. PEASHA: Well, Table-3, in the
10 height row, five percent, the height of the
11 cooling tower plumes could be almost 600-feet tall
12 with 1000 megawatt power plant.

13 MS. HOLMES: Again, which one of the
14 columns and which one of the rows are you
15 referring to on Table-3?

16 MS. PEASHA: Table-3 towards the bottom
17 of the table of the height.

18 MS. HOLMES: Are you referring to the
19 seasonal daylight, no rain, no fog hours?

20 MS. PEASHA: I am looking at, in the
21 height row, five percent. The height of the
22 cooling tower plumes for between November and
23 April.

24 MS. HOLMES: Do you understand where
25 she's looking, Mr. Walters?

1 MR. WALTERS: No, not exactly.

2 MS. HOLMES: I believe it's Table-3?

3 MS. PEASHA: Yes.

4 MS. HOLMES: Seasonal daylight, no
5 rain/fog hours, height, fifth percentile.

6 MS. PEASHA: Right.

7 MR. WALTERS: And which column are you
8 referring to?

9 MS. PEASHA: The bottom of the Table.
10 In height row-5, the height of the cooling plume
11 towers at 600-feet with 1000 megawatt.

12 MS. HOLMES: I'm sorry, we're not -- I'm
13 not finding that.

14 MR. WALTERS: We have four distinct
15 columns.

16 MS. PEASHA: I understand that, I don't
17 have those in front of me because I've got
18 everything else in front of me here. There we go.
19 Uh huh, okay, thank you for doing that for me.
20 Okay, Table-9, row at five percent, uh -- I have
21 that backwards, wait a minute. Table-3 at five
22 percent, days with plumes, would be in the bottom
23 of the Table-3 there. At five percent would be
24 anywhere from -- to a thousand, almost 600-feet
25 tall.

1 MS. HOLMES: I'm sorry, I'm still not
2 finding your reference on Table-3.

3 MS. PEASHA: Table-3, five percent under
4 the CSBP model 18 cells, which would be the whole,
5 would be 597 is what it says.

6 MR. WALTERS: Right, but that's meters,
7 not feet.

8 MS. PEASHA: That's meters. So you're
9 telling me the height of the plume at five percent
10 would be almost 600 meters?

11 MR. WALTERS: See, that's what the model
12 predicts. The model is somewhat conservative.
13 Much like air quality modeling, the modeling we
14 perform is somewhat conservative so that we make
15 sure that we don't underestimate the impacts.

16 MS. PEASHA: So for about 60 days out of
17 the year I'm going to see towers or plumes higher
18 than Rancho Seco from my house?

19 MS. HOLMES: Could you rephrase that
20 question again please?

21 MS. PEASHA: For about 60 days of the
22 year, and that's the -- in that period of time,
23 between November and April I'm going to see
24 plumes, I could see plumes taller than the Rancho
25 Seco Power Plant?

1 HEARING OFFICER SHEAN: Towers.

2 MS. PEASHA: Towers.

3 HEARING OFFICER SHEAN: Cooling towers.

4 MS. PEASHA: Yes, the cooling towers
5 themselves.

6 MR. WALTERS: Excuse me, what was the
7 percentage again that you stated?

8 MS. PEASHA: Uh, 60 days a year, you
9 know, two months, or --

10 MR. WALTERS: That would be
11 approximately right, but it's not exactly the way
12 we set the data up, so I couldn't give you an
13 exact number. I mean I can sort the data in that
14 fashion, but it would take me a while.

15 MS. PEASHA: But, but, in good
16 conscience wouldn't you say that where I live,
17 looking at a plume for an hour or so for every day
18 for over two months at that height is highly
19 significant?

20 MR. WALTERS: I don't do the
21 significance analysis.

22 MS. PEASHA: Mr. Edwards?

23 MR. WALTERS: But just to give you a
24 framework of the plumes. The largest plumes
25 generally occur in the first, what we call the

1 first hour of the day, which is actually a partial
2 hour, that includes, that would include false
3 dawn, and dawn and any -- essentially the first
4 hour we consider daylight hour includes at least
5 30 minutes after sunrise. The largest plumes are
6 always generally in that first hour.

7 Or in the second hour right after
8 sunrise and the plumes get smaller throughout the
9 day or in fact, you don't have plumes during parts
10 of the middle of the day. And then occasionally
11 the plumes will start reappearing and or get a
12 little larger at the very end of the day, but
13 they'll never be the really large plumes, which
14 are always first thing in the morning.

15 MS. PEASHA: Depending on the ambient
16 temperature, though, isn't that correct?

17 MR. WALTERS: But the ambient
18 temperature is what we use in the modeling, we
19 used hourly data for four years of hourly data.

20 MS. PEASHA: So I can say for 60 days of
21 the year I'm going to be looking at plumes that
22 could be that large.

23 MR. WALTERS: If you get up first thing
24 in the morning and look at them.

25 MS. PEASHA: Okay, Mr. Edwards, in your

1 testimony on page 4.11-15, you discussed there
2 were mitigation measures that would reduce the
3 dimensions and frequency of the visual cooling
4 tower plumes, is that correct?

5 MR. EDWARDS: Yes.

6 MS. PEASHA: Is a wet/dry plume
7 abatement technology that you describe
8 commercially available?

9 MR. EDWARDS: Yes.

10 MS. PEASHA: Has the other -- has this
11 plume abatement technology been applied to other
12 power plants in California or elsewhere in the
13 United States?

14 MR. EDWARDS: Yes.

15 HEARING OFFICER SHEAN: Which is it,
16 California or the United States? She made it
17 compound at the end.

18 MS. PEASHA: Both in California and
19 elsewhere in the United States.

20 HEARING OFFICER SHEAN: I know and I
21 want to get it, which one.

22 MR. EDWARDS: I agree, yes.

23 HEARING OFFICER SHEAN: California?

24 MR. EDWARDS: In California.

25 MS. PEASHA: And in the United States.

1 And elsewhere in the United States too Sir.

2 MS. HOLMES: If you know.

3 MR. EDWARDS: I don't have exact
4 knowledge of that, but I would certainly expect
5 so.

6 MS. HOLMES: Mr. Walters says he can
7 answer that question.

8 MR. WALTERS: Yes, it has been used in
9 other areas of the United States, primarily in
10 really cold weather areas of Chicago, New
11 Hampshire, areas like that.

12 MS. PEASHA: Uh, we already asked that
13 question.

14 HEARING OFFICER SHEAN: For purposes of
15 clarification in the statement on 4.11-15 when you
16 say a wet/dry plume abatement system for the
17 proposed CPP would cost approximately 2.5 million
18 et cetera. is that -- when you refer to wet/dry
19 at that point, is that a hybrid wet/dry cooling
20 system?

21 MR. EDWARDS: Yes.

22 HEARING OFFICER SHEAN: Okay, let me
23 just go one step further for clarification. Are
24 there plume abatement techniques for wet cooling
25 that would reduce the size of cooling tower plumes

1 in the wet cooling situation?

2 MR. EDWARDS: I don't have a lot of
3 information on that, I'm not -- maybe Will does.

4 MR. WALTERS: Well, there are other
5 technologies that you wouldn't actually call a wet
6 cooling tower. There is a wet surface air
7 condenser, which can reduce plume formation
8 depending on how it's designed and built.
9 Obviously there is air cooled condensers, which
10 again is a different technology.

11 And then there's the wet/dry systems,
12 which are essentially a dry, or well, or often
13 times a dry unit that is either on the side of or
14 on top of the conventional wet cooling tower,
15 which brings the exhaust condition below
16 saturation level. And that's essentially how it
17 works.

18 So it's not exactly a different
19 technology, it's actually adding a technology onto
20 a conventional wet tower. In the case of the type
21 of hybrid, or type of wet/dry that we're
22 considering here.

23 MS. PEASHA: Would it significantly
24 lower the plumes?

25 MR. WALTERS: It would depend on the

1 design. As you can see in the Table that I
2 provided, I mean, there are lots of different ways
3 to design it. In terms of how much dry cooling
4 you put above the wet cooling section. So it can
5 essentially eliminate the plume if you put in
6 enough dry to the point of very, very low
7 frequencies.

8 But if you put in a system that's
9 smaller, in fact, the system that we identified as
10 the 2.5 million case, I believe is a minimal
11 system, is essentially the first or smallest
12 amount of dry cooling that you would put on or at
13 least that is generally commercially available.

14 And it would be more similar to the top
15 row of the Table where I identify the plume
16 abatement, the 52 degree fahrenheit, 73 percent
17 relative humidity design point.

18 MS. PEASHA: But with the wet/dry you
19 could significantly take away the impact of
20 visual sensitivities?

21 MS. HOLMES: I think Table-13 speaks for
22 itself. He's identified the amount of reductions
23 that you would get based on the model results,
24 based on the design that you used. If you have an
25 additional question about Table-13, please go

1 ahead and ask it.

2 MS. PEASHA: Page 10 of appendix B, this
3 study shows -- the plume abatement section in
4 here, the cooling tower plumes can be abated
5 through the use of air cooled condenser dry
6 cooling. That is prepared by, who is that
7 prepared by, Mr. Walters? Is that who?

8 MR. WALTERS: Yes.

9 MS. PEASHA: Okay. So to eliminate -- I
10 mean, in your opinion to -- for plume abatement
11 isn't the dry, wet/dry system in your -- or the
12 dry cooling system for visual impacts most
13 appropriate?

14 MR. WALTERS: If you needed to abate the
15 plume, like I said, there are at least three
16 technologies you could use and it would depend on
17 how you wanted to design the system. Or what
18 level of abatement you would need. I mean, if you
19 were in a situation where you had a local
20 regulation that said no plume, you'd want to go to
21 an air cooled condenser. In this setting, we
22 don't have any local or state regulations that
23 deal with plume frequency. So it's our CEQA
24 analysis that Dale performs in terms of
25 significance.

1 MS. PEASHA: Okay, considering using
2 what you have now, or what you have applying to
3 use, taking into consideration the quarterly wind
4 reports from sub-section 8 in the air quality, the
5 winds from the northwest, would those, would those
6 winds not blow that right over your entry and
7 right over East Clay Road.

8 MS. HOLMES: Can you, can you, again,
9 what are you referring to in the air quality
10 section?

11 MS. PEASHA: The wind, the wind figures
12 in the --

13 MS. HOLMES: In the AFC?

14 MS. PEASHA: Yes.

15 MS. HOLMES: And where in the AFC?

16 MR. WALTERS: Page?

17 MS. HOLMES: Mr. Walters says he doesn't
18 need it in front of him to answer the question.

19 MS. PEASHA: Okay.

20 MR. WALTERS: The one thing actually I
21 don't know, is exactly where the entrance is,
22 because it's not actually my entrance.

23 MS. PEASHA: Okay.

24 MR. WALTERS: To say that when there is
25 plume, when the wind direction is from the

1 northwest or west northwest and if the plume is
2 large enough, it will cross over the road that's
3 south of the site. Our modeling didn't show a lot
4 of ground level fogging in that direction. We
5 actually showed ground level fogging in the
6 opposite direction.

7 MS. PEASHA: Well, from my, from my
8 visual impact, I can, those towers disappear at
9 night, the twin towers. So the visual impact of
10 these plumes when there's westerly northwest winds
11 could be just as significant to the entrances of
12 your plant. If in fact they were of -- through
13 those -- uh -- that quarterly time when they're
14 the most significant.

15 MR. WALTERS: Again, I don't understand
16 how that would impact the entrance to the plant.
17 Since the plumes

18 MS. PEASHA: Well because they're going
19 to be -- because of deliveries, transportation and
20 all, that's what I'm getting at. Won't there be a
21 significant impact on the visual or the -- do you
22 understand, Mr. Shean where I'm coming --

23 HEARING OFFICER SHEAN: Yes and I think
24 he answered your question. In terms of driver
25 visibility on Clay East Road, if I understand his

1 testimony, and just double check this. Your
2 testimony was that your modeling did not indicate
3 that there would essentially be a ground hugging
4 effect of the plume that would interfere with
5 driver safety for either employees or deliveries
6 to the entrance of the proposed facility off of
7 Clay East Road, is that what you testified?

8 MR. WALTERS: Yeah, that, that's
9 correct? Essentially the plumes will be elevated
10 and will be above the roads.

11 MS. PEASHA: Are you familiar with the
12 undulations on that road and all, and you still
13 believe that it will not impact that road at all?

14 MR. WALTERS: I'm not familiar with all
15 of the undulations of the road. But essentially
16 as the topography goes up, the plume will go up
17 with the topography for the most part. Because
18 there will be a boundary layer of air underneath
19 that will keep forcing it up.

20 MS. PEASHA: There will be a boundary
21 layer of air forcing up that even with the winds
22 blowing from the northwest.

23 MR. WALTERS: What I'm saying is if you
24 have plume, and it's reaching an area of
25 topography and that plume is elevated and there is

1 an area that is below the plume, the wind
2 essentially is going to force everything, up and
3 over the mountain, so that boundary layer will
4 still cause the plume to stay elevated above the
5 elevated terrain. I'd only expect if we had
6 really severe elevated terrain you could have an
7 actual impact.

8 MS. PEASHA: Wouldn't that depend on how
9 far the towers are from the road?

10 MR. WALTERS: Actually it would depend
11 on the difference in contours and how close those
12 differences in contours were.

13 MS. PEASHA: And the difference between
14 where the towers sit and where -- the distance of
15 road. I mean essentially they are going to come
16 down.

17 HEARING OFFICER SHEAN: If you have a
18 question in there, first of all he testified that
19 this fundamentally is either terrain following or,
20 I think it should be asked, given the enhanced
21 thermal character of the condensate that's part of
22 the plume, is rising anyway. I mean there's the
23 velocity out of the cooling tower and since it's
24 heated, they tend to rise. Is that correct?

25 MR. WALTERS: Yeah, the plume is --

1 HEARING OFFICER SHEAN: So in terms of
2 ground following, which was your question, which I
3 think your talking about impairing driver safety
4 on Clay East Road, is that the idea? And do you
5 have a concept in mind and you know approximately
6 where Clay East Road is? Is that correct? Do you
7 see a circumstance in which the plume could impair
8 driver safety by being at or near ground level
9 along Clay East Road within the model?

10 MR. WALTERS: -- well I could tell you,
11 the model doesn't predict it. Uh, in terms of
12 general experience, sometimes plumes, at the very
13 far tail end, particularly in extremely cold
14 weather conditions, that condensation will
15 actually create a situation where the plume is a
16 little denser than the ambient air as it cools and
17 gets, actually gets pretty small towards the end.

18
19 And it will occasionally dip down and
20 there will be a small tendril that will come down
21 and get close to the ground. But it's not a very
22 significant plume fogging as opposed to when we
23 have a high wind condition and we have downwash.
24 And you would have a wide and rather opaque type
25 of ground fogging event.

1 HEARING OFFICER SHEAN: Okay.

2 MS. PEASHA: So it will be -- so it be
3 an opaque ground fogging effect with those wind
4 conditions?

5 MR. WALTERS: No, I said actually the
6 reverse.

7 MS. PEASHA: Oh you did?

8 MR. WALTERS: Uh, I guess from
9 experience I can say I've driven pass the Carson
10 Refinery, oh several thousands of times and I've
11 never seen a plume actually hit the 405. I've
12 seen it go over the 405. Many times I've seen it
13 go over the 405 and last so far I couldn't see the
14 end of it during the night. But I've never seen
15 it hit the 405.

16 HEARING OFFICER SHEAN: Okay, we're at
17 noon. We have a request for public speaking. And
18 why don't we make, I guess that chair and that
19 microphone available to Ms. French. And we have
20 another speaker as well.

21 MS. FRENCH: Good morning, or afternoon.
22 My name is Karen French and I am a home and land
23 owner in Harold. I live on the south side of Twin
24 Cities Road, less than two miles due west from the
25 proposed project on a hillside that is comparable

1 in elevation to the project. Thus, I have a
2 direct and clear view of the existing Rancho Seco
3 site from ground level to the top of the towers
4 and also of the ground level of the proposed site.

5 There are at least five other home
6 owners with comparable vistas. None of the KOPs
7 precisely represent this area or are from this
8 particular direction. Previously I've submitted
9 written communication on the project and public
10 comment. And I would like to thank you for
11 holding the hearing in Harold and I would also l
12 like to thank the Public Advisors Office for their
13 assistance.

14 I want to make it clear from the start
15 that I'm not coming forward in opposition to the
16 construction of this plant. My sole mission is to
17 do my best to ensure that SMUD is a good neighbor
18 and does everything reasonably possible to
19 mitigate the impacts on this plant on me, my
20 neighbors and the many valuable resources of this
21 community.

22 I come before you today to comment
23 specifically on the issue of visual resources of
24 the proposed power plant. I've reviewed the FSA
25 for this project as well as the visual resources

1 section of the FSA's on the Russel City and
2 Metcalf Projects. I would note that in both of
3 those projects, the visual impacts of the plant
4 were authored by one individual and incorporated
5 plume impacts.

6 There are three points that I wish to
7 make. First, Commissioner, it strikes me as odd
8 that in this case there are two separate analyses
9 for the visual impacts from the power plant by two
10 different authors, especially since one is a
11 manager and one is a technical person. Why is
12 that? Is there something going on here that the
13 CEC Staff is trying to cover up?

14 If I were to ask Mr. Clayton what he
15 thinks about the significance of the cooling tower
16 plumes, I wonder what he would think? But we'll
17 never know since Mr. Clayton, the technical
18 expert, didn't sponsor the testimony.

19 Second, this whole topic is extremely
20 subjective. While I do not question Mr. Edwards
21 competence as a manager, he does not have a
22 technical background in this field. He is no more
23 an expert in determining significance than you or
24 me or Kathy Peasha, or anyone else.

25 I along with the other residents of this

1 area are the ones who are going to have to live
2 with seeing these ugly industrial plumes. I came
3 out to live in the rural countryside to get away
4 from the blight of industry. Despite the ugliness
5 of Rancho Seco, the rest of the area is not an
6 industrial part, but a beautiful rural landscape.
7 The ugliness of Rancho Seco should not be a
8 justification to further degrade the vistas in
9 this area with another ugly power plant.

10 Mr. Edwards is not the one who has to
11 live seeing these plumes all the time. We are. I
12 believe that Mr. Edwards is wrong in his
13 conclusion that these visual impacts from these
14 plumes are not significant. You've heard
15 testimony today that plumes as high as 2000 or
16 3000-feet could occur. And that for 293 hours
17 there will be significant plumes, in terms of
18 size. That they will be larger than the existing
19 Rancho Seco towers.

20 You've also heard that these are likely
21 to be in the early morning hours. I can tell you
22 that those of us who live in a rural community are
23 generally up before dawn doing our chores, we're
24 outside and we will see these. So it's not
25 insignificant that they will be in the early

1 morning hours.

2 And finally, there is a way this visual
3 blight of these plumes can be virtually
4 eliminated. And the CEC Staff even mentions it in
5 numerous places. First, Mr. Edwards says that
6 even if he does not recommend mitigation, he
7 mentions in his own testimony that use of wet/dry
8 plume abatement technology could be applied that
9 would virtually eliminate those plumes.

10 On top of Mr. Edwards saying that there
11 are means of eliminating these plumes. Then,
12 there is Mr. Walters analysis in appendix B. Mr.
13 Walters elaborates in his analysis that plume
14 abated towers would dramatically reduce the visual
15 impacts from these plumes.

16 Commissioner, it's almost like the CEC
17 Staff is dropping hints, that you, the
18 Commissioners could require the application of
19 plume abatement, but we, the Staff, don't or won't
20 or can't recommend it. As a member of the public
21 who would have to see this project for many years
22 to come.

23 I urge you to require that SMUD apply
24 plume abatement technology to their proposed power
25 plant, so that our beautiful views, out here in

1 the country are not destroyed. Thank you for
2 allowing me the opportunity to comment.

3 PRESIDING MEMBER PERNELL: Thank you.
4 The Committee does appreciate public comment,
5 especially those that are directly effected by the
6 project. So I do want to thank you for coming in.

7 MS. FRENCH: Thank you. I would also
8 like to submit written testimony, but it's not
9 really in written form yet. If I could submit
10 that next week?

11 HEARING OFFICER SHEAN: Is that
12 what-- the remarks you've just made?

13 MS. FRENCH: Yes, the remarks I just
14 made.

15 HEARING OFFICER SHEAN: Well, just note
16 if you'd like to do that, that's fine. We are
17 transcribing everything that you have said. So we
18 have it one way or the other.

19 MR. FRENCH: But it will be on the
20 record so it's not necessary. All right.

21 HEARING OFFICER SHEAN: Thank you Ms.
22 French. All right, we have Virginia Colla, who is
23 also a member of the public.

24 MS. COLLA: Good morning.

25 HEARING OFFICER SHEAN: Good morning and

1 welcome.

2 MS. COLLA: Thank you. I'm Virginia
3 Colla, one of the first things, I live right near
4 the Cogen Plant. I live within two and half three
5 miles in Sacramento. I was put out on disability
6 quite a few years ago, so I had to be busy. So I
7 am on the Franklin Redevelopment Area Committee
8 for Franklin Boulevard, which we've done a number
9 of beautiful things. I mean, new facade's, the
10 whole bit.

11 Also, we've been very active with -- I
12 have been to the plant there. I have been
13 very -- we've always felt very good because Mr.
14 Nelson would come anytime -- I wasn't really
15 involved as per say, but three ladies were on the
16 Committee to ask questions in the very beginning
17 when we had our plant.

18 HEARING OFFICER SHEAN: Now when you're
19 referring to our plant, is that the Campbell Soup?

20 MS. COLA: That's the one on 47th
21 Avenue, yeah, Campbell Soup. And anyhow, they
22 really went above and beyond giving answers. I
23 mean, I didn't have the expertise, but we did have
24 somebody on our Committee who does have some, you
25 know, teeth in it, but anyhow, the fact is that

1 we've not had any problems. I've been in the
2 plant. I've seen it. I've walked, you know,
3 through it and didn't feel like anybody was hiding
4 anything or anything.

5 And also, as far as I'm, I've walked
6 over 4,000 miles, which is no big thing, from -- I
7 go from my house past that, down to the Florin
8 Road. And honest, I was just listening to this
9 plume, and I don't remember looking up at it much
10 anymore, or even noticing when it does go off.
11 Because it's just part of the -- what happens, you
12 know in our area.

13 Now, whether that's right or wrong, but
14 we've been real happy. There's been times when
15 we've had a question and Mr. Nelson has come to
16 our PAC, RAC meet, well it was PAC, we didn't have
17 any money, but now we got a little money, so we're
18 RAC.

19 (Laughter.)

20 MS. COLLA: Well, true. Anyhow, we
21 talked about it for five years. But anyhow, I
22 really think that they need it. And I know, I've
23 lived in the county had places and you know, but
24 there's so many people and so many houses, and so
25 many things that we've got to have something and

1 that looks like a real place that would be out of
2 peoples way. And I think if we're real busy, we
3 don't have to watch the cloud. But that's only my
4 opinion. So that's it.

5 HEARING OFFICER SHEAN: All right, thank
6 you Ms. Colla.

7 PRESIDING MEMBER PERNELL: Ma'am, who is
8 Mr. Nelson, who does he represent?

9 HEARING OFFICER SHEAN: SMUD.

10 PRESIDING MEMBER PERNELL: Oh, that's
11 Bob.

12 (Laughter)

13 PRESIDING MEMBER PERNELL: Thank you,
14 and again, thank you for coming and testifying
15 before the committee.

16 HEARING OFFICER SHEAN: All right, we'll
17 take our lunch break now and I think as we did
18 yesterday, give ourselves about three quarters of
19 an hour, which means returning at about ten
20 minutes to one.

21 We have a number of topics to cover and
22 maybe the people who anticipate doing that can
23 think in terms of how we can tighten this up time
24 wise.

25 MS. HOLMES: I have a few re-direct

1 questions as well.

2 HEARING OFFICER SHEAN: Okay, but
3 they're not going to happen now.

4 MS. HOLMES: I understand that.

5 HEARING OFFICER SHEAN: Okay.

6 (Thereupon at 12:10 p.m. a lunch break
7 was taken.)

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